

SELF-PINNED CPP SENSOR USING Fe/Cr/Fe STRUCTURE

ABSTRACT

A magnetic head having a free layer, an antiparallel (AP) pinned layer structure spaced apart from the free layer, and a high coercivity structure positioned towards the AP pinned layer structure on an opposite side thereof relative to the free layer. The high coercivity structure pins a magnetic orientation of the AP pinned layer structure. The AP pinned layer structure includes at least two Fe-containing pinned layers having magnetic moments that are self-pinned antiparallel to each other, the pinned layers being separated by an AP coupling layer of Cr.